

# Quick Look at Cell Culture-based Inactivated Influenza Vaccine (Quadrivalent): cclIV4, 2023-24

**Annual influenza vaccination is recommended for all persons aged 6 months and older, including all healthy persons!**

## Indications for Use and Schedule

- Use cclIV4 (Flucelvax® Quadrivalent) for persons aged **6 months and older**
- Vaccination is recommended to be offered by the end of October and **continued throughout the flu season** until vaccine expires (see below for further timing considerations)

## Key Points

- **With the exception of adults 65 years and older**, there is no preference for any flu vaccine product over another
  - Ensure vaccination occurs with an **age-appropriate product and dose volume**
- Some children aged 6 months through 8 years may need 2 doses of 2023-24 seasonal flu vaccine to best protect them (see below)
- Persons aged 9 years and older (at the time of their first dose of 2023-24 flu vaccine) only need 1 dose of flu vaccine, regardless of previous flu vaccination history

## Vaccine Administration<sup>1</sup>

- Administer cclIV4 **intramuscular (IM)** in the deltoid of the arm (preferred) or the anterolateral thigh
  - Children: 1-inch needle
  - Adolescents/adults: 1- to 1.5-inch needle
- Must administer vaccine IM, if given by another route; should repeat dose as soon as possible
- Can be given with other vaccines at the same visit – do not miss an opportunity
  - Use separate sites, space at least 1-inch apart

## Storage and Handling

- Store in the refrigerator at **36°F to 46°F (2°C to 8°C)**
- Pharmaceutical-grade (purpose-built) units are preferred for vaccine storage
- Do **not** freeze; keep in original box with lid on/protect from light
- Store different IIV formulations apart and label with age indications
- Do **not** use expired vaccine
- Multi-dose vial (MDV) – Flucelvax MDV may be used up until the expiration date, between uses return the MDV to recommended storage conditions

## INFLUENZA DOSE VOLUME IS BASED ON AGE AND FLU VACCINE PRODUCT:

- cclIV4 dosage for persons aged 6 months and older is **0.5 mL** per dose
- For dose volumes of other IIVs, refer to “2023-24 Seasonal Influenza Vaccine Dose Volumes for Children” at [www.michigan.gov/flu/resources/resources-for-health-professionals](http://www.michigan.gov/flu/resources/resources-for-health-professionals)

## INFORMATION ON WHICH CHILDREN AGED 6 MONTHS THROUGH 8 YEARS NEED 2 DOSES OF FLU VACCINE:

- Determination of the number of doses needed is based on the number of doses of flu vaccine received in previous seasons and the age at the time of the first dose of 2023-24 flu vaccine
- Children aged 6 months through 8 years who received 2 or more total doses of any trivalent or quadrivalent flu vaccine (i.e., IIV3, IIV4, LAIV3, LAIV4, cclIV3, cclIV4) at least 4 weeks apart before July 1, 2023, only need 1 dose of 2023-24 flu vaccine
- If a child has not received at least 2 trivalent or quadrivalent flu vaccines at least 4 weeks apart before July 1, 2023, give 2 doses of age-appropriate 2023-24 flu vaccine separated by 4 weeks
  - Give the 1<sup>st</sup> dose as soon as possible after vaccine becomes available (including July and August if available) to allow the 2<sup>nd</sup> dose to be received by the end of October, ensure at least 4 weeks in between doses
  - If both doses have not been received by the end of October, still complete the 2-dose series
  - The same vaccine product does not need to be used for both doses; use any age-appropriate and correct dose volume flu vaccine
  - Both doses should be administered even if the child turns 9 years old between dose 1 and dose 2
  - Refer to “Who Needs 2 Doses of 2023-24 Seasonal Influenza Vaccine?” at [www.michigan.gov/flu/resources/resources-for-health-professionals](http://www.michigan.gov/flu/resources/resources-for-health-professionals)

#### CONTRAINDICATIONS (PERSONS WHO SHOULD NOT RECEIVE cclIV4):

- Severe allergic reaction (e.g., anaphylaxis) after a previous dose of any cclIV or any component of cclIV4

#### PRECAUTIONS (IN CERTAIN CIRCUMSTANCES, PERSONS MAY RECEIVE cclIV4):

- Moderate or severe acute illness with or without fever
- History of Guillain-Barré syndrome (GBS) within 6 weeks of previous flu vaccination
- History of severe allergic reaction to a previous dose of any other flu vaccine (i.e., any egg based IIV, RIV, or LAIV)

#### FURTHER POINTS TO CONSIDER:

- ACIP recommends that all persons aged 6 months and older with egg allergy should receive influenza vaccine. Any influenza vaccine (egg based or nonegg based that is otherwise appropriate for the recipient's age and health status) can be used
  - Egg allergy alone necessitates no additional safety measures for influenza vaccination beyond those recommended for any recipient of any vaccine, regardless of severity of previous reaction to egg
  - All vaccines should be administered in settings in which personnel and equipment needed for rapid recognition and treatment of acute hypersensitivity reactions are available
  - cclIV4 **does not** contain egg protein
  - Refer to "2023-24 Influenza Vaccination for Persons Who Report Egg Allergy" at [www.michigan.gov/flu/resources/resources-for-health-professionals](http://www.michigan.gov/flu/resources/resources-for-health-professionals)
- Vaccination is recommended to be offered by the end of October and **continued throughout the flu season** until vaccine expires
  - For most adults (particularly adults aged 65 years and older) and for pregnant persons in the first or second trimester: Vaccination during July and August should be avoided unless there is concern that vaccination later in the season might not be possible
  - Pregnant persons in the 3<sup>rd</sup> trimester can be considered to receive flu vaccine soon after it arrives, as vaccination has shown to reduce risk of flu illness in infants in the 1<sup>st</sup> months of life
- A CDC study showed a small increased risk for febrile seizures during the 24 hours following simultaneous administration of IIV and PCV13 and/or DTaP. ACIP has considered the risks and benefits and recommends these vaccines be given concomitantly when needed. For more information, refer to [www.cdc.gov/vaccinesafety/concerns/febrile-seizures.html](http://www.cdc.gov/vaccinesafety/concerns/febrile-seizures.html).
- cclIV4 can be given with all other vaccines and with antiviral medications; for more information, refer to [www.cdc.gov/flu](http://www.cdc.gov/flu)
- Use current IIV/RIV Vaccine Information Statement (VIS) with details about the Michigan Care Improvement Registry (MCIR); Michigan VIS are posted at [www.michigan.gov/VIS](http://www.michigan.gov/VIS)
- Document type of flu vaccine given as "cclIV4" on the vaccine administration record, electronic medical record (EMR) and the immunization record card
- For more information on Recombinant Influenza Vaccine (RIV4, Flublok® Quadrivalent), Live Attenuated Influenza Vaccine (LAIV4, FluMist® Quadrivalent), or Inactivated Influenza Vaccines (IIV4, High-Dose IIV4, and Adjuvanted IIV), refer to additional Quick Looks at [www.michigan.gov/vaccinequicklooks](http://www.michigan.gov/vaccinequicklooks)

<sup>1</sup> Assessment of needle size and injection site must be made for each person based on size of the muscle, thickness of adipose tissue at the injection site, volume of the material to be administered, and injection technique. For more information, see Advisory Committee on Immunization Practices (ACIP) General Best Practice Guidelines for Immunization at [www.cdc.gov/vaccines/hcp/acip-recs/general-recs/index.html](http://www.cdc.gov/vaccines/hcp/acip-recs/general-recs/index.html).

For more guidance on influenza vaccine recommendations, refer to [Prevention and Control of Seasonal Influenza with Vaccines: Recommendations of the Advisory Committee on Immunization Practices — United States, 2023–24 Influenza Season | MMWR \(cdc.gov\)](http://www.cdc.gov/mmwr/preview/mmwrhtml/rr6009a1.htm) located at [www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/flu.html](http://www.cdc.gov/vaccines/hcp/acip-recs/vacc-specific/flu.html).

Publicly purchased cclIV4 can be administered to eligible children aged 6 months through 18 years through the Vaccines for Children (VFC) program. Eligible children include those who are uninsured, underinsured, Medicaid eligible, American Indian, and Alaskan Native.

For more information regarding flu vaccination, contact your local health department, visit Michigan Department of Health and Human Services at [www.Michigan.gov/flu](http://www.Michigan.gov/flu), or visit [www.cdc.gov/flu](http://www.cdc.gov/flu) or [www.cdc.gov/mmwr](http://www.cdc.gov/mmwr).